



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/675,855

09/25/2003

Edward Draper

83456.0007.US

3955

30076

7590

07/09/2008

STEPTOE & JOHNSON LLP
2121 AVENUE OF THE STARS
SUITE 2800
LOS ANGELES, CA 90067

EXAMINER

HOFFMAN, MARY C

ART UNIT

PAPER NUMBER

3733

MAIL DATE

DELIVERY MODE

07/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/675,855	Applicant(s) DRAPER, EDWARD	
	Examiner MARY HOFFMAN	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9,14-16,18-21 and 24 is/are pending in the application.
- 4a) Of the above claim(s) 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,14-16,18-20 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

It is noted that comparison of the claims with Species 1, Figures 3A, 3C, 3E, and the specification shows, however, that Species 1 does not have a pair of laterally displaced links (this feature is shown in the embodiment of FIG. 7) as required in claim 21. Claim 21 is hereby withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention/species, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7, 9, 14, 15, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker (U.S. Patent No. 4,637,382) in view of Taylor (U.S. Patent No. 3,902,482).

Walker discloses a method including an apparatus for controlling the load on articular cartilage forming part of an articular joint connecting a first bone to a second bone of a human or animal joint to treat arthritic conditions affecting the joint, comprising

Art Unit: 3732

(a) a first fixation assembly (ref. #16) for attachment to the first bone; (b) a second fixation assembly (ref. #14) for attachment to the second bone; and (c) a link assembly (ref. #22) configured to span anatomy affected by arthritic conditions but lacking fractures, the first and second fixation assembly thereby each being angularly displaceable relative to the link assembly. The apparatus provides reduction of pressure on at least a portion of the joint without substantially resisting an angular displacement associated with relatively full mobility of the first and second bones of the joint to thereby treat arthritic conditions affecting the joint. The method further includes attaching the first fixation assembly to the first bone and attaching the second fixation assembly to the second bone (see FIG. 3). The first fixation assembly includes at least one pin (ref. #12) for engaging with the first bone. The first fixation assembly includes a clamp (see mounting holes in ref. #16) for mounting a plurality of pins each for engaging with the first bone, said plurality of pins being spaced along the length of the first fixation assembly. The method further includes a second corresponding apparatus for coupling thereto by a plurality of bone pins (col. 3, lines 3-5).

Walker discloses the claimed invention except for the link assembly including means for limiting the angular displacement of the fixation assemblies relative to the link assembly and including means for varying separation of the first fixation assembly and the second fixation assembly as a function of the angular displacement of either fixation assembly relative to the link assembly being coupled to the first fixation assembly by a first pivot having one or two degrees of rotation freedom and coupled to the second fixation assembly by a second pivot, and for the link assembly including a fixed

separation member for maintaining said first and second pivots at a fixed distance of separation.

Taylor discloses a link assembly including means for limiting the angular displacement of the fixation assemblies relative to the link assembly and including means for varying separation of the first fixation assembly and the second fixation assembly as a function of the angular displacement of either fixation assembly relative to the link assembly being coupled to the first fixation assembly by a first pivot (see ref. #33) having one or two degrees of rotation freedom and coupled to the second fixation assembly by a second pivot (see ref. #32), and for the link assembly including a fixed separation member (at ref. #80) for maintaining said first and second pivots at a fixed distance of separation to provide a pivotal movement closely simulating the flexing action of an anatomical knee (See ABSTRACT).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the method of Walker with an apparatus including a link assembly including means for limiting the angular displacement of the fixation assemblies relative to the link assembly and including means for varying separation of the first fixation assembly and the second fixation assembly as a function of the angular displacement of either fixation assembly relative to the link assembly being coupled to the first fixation assembly by a first pivot having one or two degrees of rotation freedom and coupled to the second fixation assembly by a second pivot, and for the link assembly including a fixed separation member for maintaining said first and second

pivots at a fixed distance of separation in view of Taylor to provide a pivotal movement closely simulating the flexing action of an anatomical knee.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker (U.S. Patent No. 4,637,382) in view of Taylor (U.S. Patent No. 3,902,482) further in view of Martinelli et al. (U.S. Patent No. 6,409,729).

Walker in view of Taylor discloses the claimed invention except for the first fixation assembly including engagement means for engaging at least one bone pin, the engagement means being rotatable about a longitudinal axis of the first fixation assembly, and the first fixation assembly including engagement means for engaging at least one bone pin, the engagement means being rotatable about a transverse axis of the first fixation assembly.

Martinelli et al. a first fixation assembly including engagement means for engaging at least one bone pin, the engagement means being rotatable about a longitudinal axis of the first fixation assembly, and the first fixation assembly including engagement means for engaging at least one bone pin, the engagement means being rotatable about a transverse axis of the first fixation assembly allowing greater freedom of movement.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the method of Walker in view of Taylor with an apparatus including a first fixation assembly including engagement means for engaging at least one bone pin, the engagement means being rotatable about a longitudinal axis of the first fixation assembly, and the first fixation assembly including engagement

means for engaging at least one bone pin, the engagement means being rotatable about a transverse axis of the first fixation assembly in view of Martinelli et al. to allow greater freedom of movement.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker (U.S. Patent No. 4,637,382) in view of Taylor (U.S. Patent No. 3,902,482) further in view of Fischer et al. (U.S. 5,352,190).

Walker in view of Taylor discloses the claimed invention except for a drive member coupled to the first fixation assembly and to the second fixation assembly for controllably varying the angular displacement of the first and second fixation assemblies relative to one another.

Fischer et al. disclose a drive member coupled to the first fixation assembly and to the second fixation assembly for controllably varying the angular displacement of the first and second fixation assemblies relative to one another to strengthen the joint (col. 3, lines 35-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the method of Walker in view of Taylor with an apparatus including a drive member coupled to the first fixation assembly and to the second fixation assembly for controllably varying the angular displacement of the first and second fixation assemblies relative to one another in view of Fischer et al. to strengthen the joint.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker (U.S. Patent No. 4,637,382) in view of Taylor (U.S. Patent No. 3,902,482) further in view of Stark et al. (US 2001/0020143).

Walker in view of Taylor discloses the claimed invention except for a sensor adapted to monitor the load applied across the link assembly, the sensor comprising a strain gauge.

Stark et al. disclose a sensor adapted to monitor the load applied across the link assembly, the sensor comprising a strain gauge to measure the forces within the joint.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the method of Walker in view of Taylor with an apparatus including a sensor adapted to monitor the load applied across the link assembly, the sensor comprising a strain gauge, in view of Stark et al. to measure the forces within the joint.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARY HOFFMAN whose telephone number is

Art Unit: 3732

(571)272-5566. The examiner can normally be reached on Monday-Thursday 10:00-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo C. Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mary C. Hoffman/
Examiner, Art Unit 3733

/Cris L. Rodriguez/

Supervisory Patent Examiner, Art Unit 3732